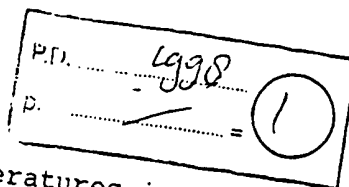


XP-002108925



- AN - 1998:174502 BIOSIS  
 DN - PREV199800174502  
 TI - Acclimation to freezing temperatures in perennial ryegrass ( Lolium perenne.  
 IN - Harrison, Judith; Tonkinson, Claire; Eagles, Colin; Foyer, Chris  
 CS - Inst. Grassland Environmental Res., Plas Gogerddan, Aberystwyth, Ceredigion SY23 3EB UK  
 SO - Acta Physiologiae Plantarum, (1997) Vol. 19, No. 4, pp. 505-515. ISSN: 0137-5881.  
 DT - Article  
 LA - English  
 AB - The increasing demands being placed on natural grasslands in the following the appearance of Bovine Spongiform Encephalitis require that forage crops provide a reliable extended season of growth, combined with good winter survival to ensure sward longevity. The ability to tolerate sub-zero temperatures is integral to the survival of perennial forages. Since the development of freezing tolerance is crucial to the survival and productivity of over-wintering crops, forage breeding programmes require an improved understanding of the individual characteristics that contribute to tolerance to sub-zero temperatures. Photosynthesis, carbohydrate content and changes in protein composition were investigated in two varieties of Lolium perenne which differ in their response to growth at low temperatures.  
 CC - Agronomy - Forage Crops and Fodder \*52506  
 External Effects - Temperature as a Primary Variable - Cold \*106  
 Plant Physiology, Biochemistry and Biophysics - Temperature \*51506  
 Plant Physiology, Biochemistry and Biophysics - Photosynthesis \*51506  
 BC - Gramineae 25305  
 IT - Major Concepts  
 Agronomy (Agriculture); Chemical Coordination and Homeostasis  
 IT - Miscellaneous Descriptors  
 carbohydrate content; freezing temperature acclimation; photosynthesis; plant breeding; protein composition  
 ORGN- Super Taxa  
 Gramineae: Monocotyledones, Angiospermae, Spermatophyta, Plantae  
 ORGN- Organism Name  
 Lolium -perenne [perennial ryegrass ]  
 ORGN- Organism Superterms  
 Angiosperms; Monocots; Plants; Spermatophytes; Vascular Plants